Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of	PEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY
Preparation for International Telecommunication Union World) IC Docket No. 94-31
Radiocommunication Conferences	DOCKET FILE COPY ORIGINAL

OPPOSITION

Constellation Communications, Inc. ("Constellation"), by its attorney, files this

Opposition to the "Petition for Partial Clarification And Reconsideration" of the

Commission's Report, FCC 95-256 released June 15, 1995, in this proceeding ("Report")

filed by the Association of American Railroads ("AAR"). The petition of AAR is directed at
the Commission's recommendation that the 1995 World Radiocommunication Conference

("WRC") allocate spectrum at 6 GHz for feeder links for mobile-satellite service ("MSS")

systems.

Constellation is an applicant for a low-Earth orbit ("LEO") satellite system in the 1610-1626.5 MHz and 2483.5-2500 MHz bands.¹ Constellation has proposed the use of the 6 GHz band for its space-to-Earth feeder links as an essential element of its system design.²

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¹ See application File Nos. 17-DSS-P-91(48) and CSS-91-013, as amended on November 16, 1994.

² Constellation's system uses code division multiple access techniques to maximize spectrum efficiency and to accommodate multiple feeder link earth stations. To maximize the flexibility to locate individual feeder link earth stations based on the requirements of the individual countries served by the system, the Constellation satellites employ earth coverage satellite antenna beams. Use of higher frequency bands, such as the 20/30 GHz bands, would greatly complicate the satellite design and significantly increase costs. See e.g., Constellation's November 16, 1994 amendment, and Comments of Constellation Communications, Inc. in CC Docket No. 92-166, May 5, 1994.

This band is already allocated for satellite use in the Earth-to-space direction.³ Reverse band working in this band has been determined to be a technically feasible means of accommodating LEO MSS feeder link requirements in the space-to-Earth direction on a global basis.⁴ Moreover, coordination procedures between earth stations and terrestrial fixed stations are well established and have been successfully practiced since the 1960s.⁵

The use of the 6 GHz band proposed in the Report is for space-to-Earth transmissions. In its Report, the Commission has taken the necessary steps to insure that the terrestrial fixed service of concern to AAR is protected from interference by proposing that power flux density limits be imposed on satellite transmission. Thus, there will not be any adverse impact on terrestrial fixed facilities in the 6 GHz band resulting from the Commission's proposal that WRC-95 allocate this band for LEO MSS space-to-Earth feeder links.

Any interference resulting from the Commission's proposal will be from the terrestrial fixed service into the feeder link earth station receivers. However, normal coordination procedures, as in other shared bands where tens of thousands of earth stations and terrestrial fixed stations operate compatibly, will provide an orderly mechanism for the

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³ <u>See</u> Article 8 of the International Radio Regulations and Part 2 of the Commission's Rules and Regulations, §2.106.

⁴ See e.g., Report of the Conference Preparatory Meeting, Chapter 2, Part C, §3.2.5.

⁵ <u>See e.g.</u>, Article 11 and Appendix 28 of the International Radio Regulations and Part 25 of the Commission's Rules and Regulations, §§25.251-25.256.

⁶ <u>See</u> proposal to ADD RR 809B and MOD Article 28, Report, Appendix 1, Section C at 7. The values proposed by the Commission are those recommended by the CPM. <u>See</u> Chapter 2, Part C, §3.6.4.8 of the CPM-95 Report.

development of both services in the band on a shared basis. Moreover, the Commission has clearly indicated that priority for relocating 2 GHz microwave facilities in the 6 GHz band would be addressed in future domestic rulemaking proceedings.⁷ AAR has provided no reasoned justification why any further clarification is needed at this time.

In summary, AAR has provided no facts or technical analyses in its Petition to warrant reconsideration or clarification of the Commission's Report. The concerns expressed by AAR are readily accommodated by the Commission's proposed power flux density limit and by the normal coordination process that will be conducted before any specific feeder link earth stations are licensed by the Commission. In any event, if further clarification is desired by AAR, it is a matter more properly addressed in the future rulemaking proceeding that will be conducted by the Commission to implement domestically any allocations made by the WRC-95 on an international basis.

For these reasons, Constellation supports the Commission's proposal to allocate 6 GHz spectrum to the MSS feeder links, and requests the Commission to deny AAR's petition.

Respectfully submitted,

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August 10, 1995

⁷ See Report at para. 53.

CERTIFICATE OF SERVICE

I, Robert A. Mazer, do hereby certify that a true and correct copy of the foregoing "Opposition" by Constellation Communications, Inc. was sent by first-class mail, postage prepaid, or hand-delivered*, on this 10th day of August, 1995, to the following persons.

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